		Average Recovery Values of Oregon Pesticides in Cannabis Plant Material																							
		50 ng/g spike level (dry weight)								200 ng/g spike level (dry weight)								1000 ng/g spike level (dry weight)							
		Orange kush (n =3)		Permafrost (n =3)		Composite (n =3)		ALL matrices (n =9)		Orange kush (n =3)		Permafrost (n =3)		Composite (n =3)		ALL matrices (n =9)		Orange kush (n =3)		Permafrost (n =3)		Composite (n =3)		ALL matrices (n =9)	
		AVE Rec	RSD	AVE Rec	RSD	AVE Rec	RSD	AVE Rec	RSD	AVE Rec	RSD	AVE Rec	RSD	AVE Rec	RSD	AVE Rec	RSD	AVE Rec	RSD	AVE Rec	RSD	AVE Rec	RSD	AVE Rec	RSD
Name	**RT (min)**	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Acephate	1.51	90	5	87	3	91	7	89	2	92	3	80	4	92	4	88	8	96	4	81	5	94	5	90	9
Acetamiprid	5.44	95	5	92	2	97	5	95	3	96	2	87	5	99	3	94	7	99	3	88	5	100	6	96	7
Aldicarb	5.97	63	11	130	18	75	14	88	38	85	12	84	14	110	4	93	16	97	3	91	9	100	4	97	6
Azoxystrobin	7.38	96	6	94	4	98	4	96	2	96	2	87	4	100	5	95	8	100	4	88	6	98	2	97	8
Bifenazate	7.81	94	5	84	3	72	11	83	14	94	2	81	5	78	3	84	10	96	2	84	4	81	4	87	9
Boscalid	7.50	100	12	92	15	110	10	100	8	93	5	79	5	93	4	89	9	100	2	91	2	92	5	95	7
Carbaryl	6.61	92	7	91	4	100	20	95	7	96	2	84	3	97	5	93	8	100	4	86	4	99	5	95	8
Carbofuran	6.47	95	4	97	1	94	7	96	1	97	0	87	2	98	3	94	6	100	4	89	4	100	4	97	7
Chlorantraniliprole	7.15	88	2	85	2	96	2	90	6	97	2	83	7	99	4	93	9	100	3	84	6	95	3	93	9
Chlorpyrifos	10.79	86	13	95	6	110	22	95	10	93	8	71	13	98	6	88	16	100	8	71	15	94	5	89	18
Clofentezine	9.20	85	7	83	8	87	14	85	3	89	1	81	9	92	6	87	7	99	2	80	9	89	6	89	11
Diazinon	9.01	90	6	89	8	95	6	92	3	94	5	85	7	93	8	91	5	100	3	90	3	85	6	92	9
Dimethoate	5.13	98	3	92	4	98	3	96	4	99	3	88	5	98	3	95	6	100	4	89	5	99	5	96	7
Ethoprophos	8.23	95	6	83	3	85	5	87	7	96	5	78	11	95	3	89	11	100	4	83	4	93	8	93	10
Etofenprox	11.37	99	2	82	7	79	8	87	13	85	1	73	8	84	4	81	8	92	3	72	12	83	6	82	12
Etoxazole	11.00	84	5	80	3	78	6	81	3	89	5	71	8	80	5	80	11	96	7	74	11	84	7	85	13
Fenoxycarb	8.43	93	6	93	6	96	2	94	2	96	4	85	5	94	3	92	6	100	3	89	3	95	2	96	7
Fenpyroximate	11.14	86	7	83	4	80	11	83	3	88	2	69	13	89	12	82	14	98	5	70	8	94	9	88	17
Fipronil	8.24	99	12	91	7	93	16	94	5	95	3	72	12	93	7	87	15	95	1	79	2	95	7	90	10
Flonicamid	3.74	100	8	<LOD	NA	<LOD	NA	NA	NA	93	4	76	7	94	7	87	11	100	3	86	4	93	6	94	9
Fludioxonil	7.42	120	16	71	15	91	18	93	25	97	8	82	8	96	6	92	9	100	5	91	1	110	8	99	8
Hexythiazox	10.84	84	8	82	7	87	9	84	3	91	2	69	6	83	9	81	14	98	3	70	19	79	5	82	18
Imazalil	6.77	77	1	71	4	82	4	77	7	81	4	83	32	83	7	82	1	88	3	82	12	81	5	83	4
Imidacloprid	4.96	94	6	97	2	98	8	97	2	96	2	87	4	98	4	94	6	100	3	86	5	100	5	96	9
Kresoxim-methyl	8.62	91	3	95	3	95	11	94	2	97	2	81	4	97	3	92	10	100	2	86	5	97	4	95	9
Malathion	7.61	87	7	94	8	79	10	87	9	96	2	90	1	95	2	94	3	100	4	94	4	93	1	96	5
Metalaxyl	7.09	96	2	93	5	97	7	95	2	95	2	86	1	96	4	92	6	100	3	86	3	98	5	95	9
Methiocarb	7.41	96	7	91	8	100	1	96	6	97	3	83	2	100	1	93	10	100	2	87	4	96	3	95	8
Methomyl	3.96	95	7	94	3	94	8	94	1	97	3	85	3	95	4	93	7	100	3	88	6	98	4	96	7
Myclobutanil	7.71	95	2	95	5	94	7	95	1	96	5	83	5	93	5	91	8	100	5	90	8	97	2	96	6
Oxamyl	3.80	93	5	92	4	95	9	94	2	96	4	85	5	95	4	92	7	100	4	87	5	99	4	95	8
Paclobutrazol	7.59	93	3	90	7	96	7	93	3	93	2	76	9	92	1	87	11	99	3	82	2	97	8	93	10
Phosmet	7.21	89	4	90	2	95	9	91	4	96	2	86	8	100	6	94	7	100	4	86	3	100	2	97	9
Piperonyl Butoxide	10.77	95	3	88	1	INC	INC	91	5	93	0	74	10	77	6	81	12	100	5	77	14	89	9	89	13
Prallethrin	9.95	100	3	99	12	<LOD	NA	NA	NA	93	7	91	15	94	13	92	2	100	5	96	7	86	5	95	9
Propiconazole	9.17	89	4	74	16	88	10	84	10	89	6	77	13	90	8	86	8	94	4	82	4	85	4	87	8
Propoxur	6.42	96	7	95	3	100	5	98	5	96	2	87	5	100	3	95	8	100	5	89	4	100	2	97	8
Pyridaben	11.22	86	6	77	6	76	14	80	7	86	4	65	17	83	11	78	15	96	4	66	16	87	11	83	18
Spinosad A	9.31	69	8	66	1	63	8	66	6	73	1	66	25	65	25	68	7	79	4	62	3	60	19	67	16
Spinosyn D	9.97	62	3	63	3	62	9	62	5	66	3	61	18	58	25	62	7	74	2	61	1	56	19	64	15
Spirotetramat	8.13	90	4	90	9	96	10	92	4	93	3	79	5	93	7	89	9	97	3	80	6	97	6	92	11
Spiroxamine	7.27	68	6	63	7	69	24	67	5	68	5	64	36	69	17	67	3	74	2	63	14	67	17	68	8
Tebuconazole	8.74	92	8	86	2	89	9	89	3	93	4	76	3	88	5	85	10	98	4	79	1	92	7	90	11
Thiacloprid	5.81	93	6	94	1	96	6	94	2	96	3	86	4	97	4	93	6	100	4	88	5	100	5	96	8
Thiamethoxam	4.22	94	5	93	2	97	7	95	2	97	3	85	6	97	5	93	7	99	4	86	5	99	5	95	8
Trifloxystrobin	9.97	93	4	92	4	95	7	93	1	95	2	85	6	94	6	91	6	100	3	92	7	92	5	96	7

AVE Rec = average recovery value
RSD = relative standard deviation
<LOD = below limit of detection
NA = not applicable
INC = incurred pesticide

Notes on other Oregon pesticides
1) Abamectin =heat sensitive so optimized interface parameters need to reach low levels
2) Spiromesifen = known insensitive compound, either increase injection volume or test via GC-MS/MS
3) Daminozide = polar pesticide requiring different LC-MS/MS method
4) GC amenable (known low LC-MS signal) = Bifenthrin, cyfluthrin, dichlorvos, MGK-264, permethrin
5) Pyrethrins are insensitive and may require increasing injection volume to reach low levels

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